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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/575,412	04/10/2006	Philip Steven Newton	FR 030123	3707
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EXAMINER GIARDINO JR, MARK A				
ART UNIT		PAPER NUMBER		
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/575,412

**Applicant(s)**

NEWTON ET AL.

**Examiner**

MARK A. GIARDINO JR

**Art Unit**

2185

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 February 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SE/US)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

The Examiner acknowledges the applicant's submission of the amendment dated . At this point claims 1, 6, and 15 have been amended and claims 16-20 have been added. Thus, claims 1-20 are pending in the instant application.

The instant application having Application No. 10/575,412 has a total of 20 claims pending in the application, there are 3 independent claims and 17 dependent claims, all of which are ready for examination by the examiner.

**REJECTIONS BASED ON PRIOR ART**

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 7, and 11-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Sprigg (US 2003/0061504).

**Regarding Claim 1**, Sprigg teaches a device comprising:

A local storage arrangement for storing a plurality of data items (storage 119 in Figure 1);

A receptacle for receiving a removable storage carrier storing a software application (I/O Device 125, also see paragraph 0026 for a list of removable carriers);

A storage management unit for allocating a portion of the local storage arrangement to the removable storage carrier (a storage management unit is inherently present for "receiving the application [from the remote storage carrier] at the device, [and] storing the application in a storage on the device [this storage on the device corresponding to a portion of the local storage arrangement], paragraph 0013 in Sprigg) and referencing a portion with identification information (the identification information corresponding to "a unique identifier to distinguish it from other applications", Paragraph 0034 in Sprigg, also see Figure 4, step 400) respecting respective access rights to a data item stored in the portion granted to the software application ("if the application has privilege to the file's location...then the application is granted access to the file. If the application is not permitted access to the file's location, access is denied", Paragraph 0055 in Sprigg, also "the application is granted access to a portion of the storage...[and] the application is denied access to the storage area outside the granted portion" in the abstract of Sprigg) stored on the removable data carrier ("the applications 135 may be received...via the I/O device [the I/O device corresponding to the removable data carrier]", so the application is stored on and received from the removable data carrier, Paragraph 0028 in Sprigg).

**Regarding Claim 2**, Sprigg teaches all limitations of Claim 1, wherein the storage management unit comprises Application Programming Interfaces that control an access to the local storage arrangement (paragraph 0030).

**Regarding Claim 3**, Sprigg teaches all limitations of Claim 1, wherein the access rights include at least one of the following with respect to the data item: viewing,

reading, executing, accessing, retrieving, deleting, writing, and saving (see Paragraph 0022, where applications may be denied access to other applications).

**Regarding Claim 7**, Sprigg teaches all limitations of Claim 1, wherein the identification information includes an identifier of the software application (see Paragraph 0038, where the name of the software application is used as the identifier).

**Regarding Claim 11**, Sprigg teaches all limitations of Claim 1, wherein the storage management unit causes one or more data items not comprised in the allocated portion to be hidden from the software application (paragraph 0039, also see Figure 3).

**Regarding Claim 12**, Sprigg teaches all limitations of Claim 1, wherein the portion comprises the item only (last two sentences of paragraph 0039).

**Regarding Claim 13**, Sprigg teaches all limitations of Claim 1, wherein the storage management unit grants no access rights to the software application with respect to other data items stored outside the allocated portion (paragraphs 0039 and 0040).

**Regarding Claim 14**, Sprigg teaches all limitations of Claim 1, wherein the storage management unit hides to the software application other data items stored outside the allocated portion (paragraphs 0039 and 0040).

**Regarding Claim 15**, Sprigg teaches a method for managing a local storage arrangement in a device comprising:

Allocating a portion of the local storage arrangement to an optical storage carrier inserted in the device (see paragraph 0013, also see paragraph 0026 for removable carriers, among which the optical CD-ROM is listed);

Granting access rights to a software application stored on the carrier with respect to a data item stored in the portion (see Paragraph 0022, where applications may be denied access to other applications); and,

Including in the portion identification information respecting the access rights (see paragraph 0034, 0037, and 0038 for identification information) of the application stored on the carrier ("the applications 135 may be received... via the I/O device", so the application is stored on and received from the removable data carrier, Paragraph 0028 in Sprigg).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4, 6 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sprigg in view of Ayat (US 6,904,232) and Lee (US 6,414,920).

**Regarding Claim 4**, Sprigg teaches all limitations of Claim 1 as discussed above. However, Sprigg does not teach where the identification information includes an identifier of the removable storage carrier. Ayat teaches Burst Cutting Area information being read from an optical device to a host (Column 1 Lines 12-14 and Column 1 Lines 26-33, also see Figure 2B in Ayat). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter

pertains to have used this identification information for the information described in Claim 1. Lee provides the motivation when he states that by adding and using this information to a disc, one may obtain the benefit of a harder to duplicate disc (Column 1, Lines 15-23 in Lee).

**Regarding Claim 6**, the combined device meets all limitations of Claim 4, wherein the identification information is a Burst Cutting Area as described above.

**Regarding Claim 20**, Sprigg teaches a device comprising:

- a local storage arrangement for storing a plurality of data items (119 in Figure 1);
- a receptacle for receiving a removable storage carrier storing a software application (I/O Device 125, also see paragraph 0026 for a list of removable carriers);
- a storage management unit for allocating a portion of the local storage arrangement to the removable storage carrier (a storage management unit must be present for "receiving the application [from the remote storage carrier] at the device, [and] storing the application in a storage on the device [this storage on the device corresponding to a portion of the local storage arrangement], paragraph 0013 in Sprigg) and referencing the portion with an identifier (the identification information corresponding to "a unique identifier to distinguish it from other applications", Paragraph 0034 in Sprigg, also see Figure 4, step 400) and respecting respective access rights to a data item ("if the application has privilege to the file's location...then the application is granted access to the file. If the application is not permitted access to the file's location, access is denied", Paragraph 0055 in Sprigg, also "the application is granted access to a portion of the storage...[and] the application is denied access to the storage area

outside the granted portion" in the abstract of Sprigg) stored in the portion granted to the removable storage carrier ("the applications 135 may be received...via the I/O device", so the application is stored on and received from the removable data carrier, Paragraph 0028 in Sprigg).

However, Sprigg does not teach where the identification information includes an identifier of the removable storage carrier. Ayat teaches Burst Cutting Area information being read from an optical device to a host (Column 1 Lines 12-14 and Column 1 Lines 26-33, also see Figure 2B in Ayat). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains to have the identification information of Sprigg to include an identifier of the removable storage carrier as in Ayat. Lee provides the motivation when he states that by adding and using this information to a disc, one may obtain the benefit of a harder to duplicate disc (Column 1, Lines 15-23 in Lee).

**Claim 5** is rejected under 35 U.S.C. 103(a) as being unpatentable over Sprigg, Ayat, and Lee as applied to Claim 4 and 6 above, and further in view of Comerford (US 4,577,289).

Sprigg and Ayat teach all limitations of Claim 4 as discussed above. However, they do not teach where the identification information includes a unique identification number associated with the removable storage carrier. Comerford teaches storing a unique key on an individual disk (Column 2 Lines 63-68 in Comerford). It would have been obvious to a person having ordinary skill in the art to which the subject matter



pertains to have included this unique identification number in the identification information of Claim 1. As motivation, this will help prevent piracy, since a machine will be able to determine if a medium is an original or a copy (see Column 2 Lines 35-38 in Comerford). Thus, by combining the devices, additional benefits are obtained.

**Claim 8** is rejected under 35 U.S.C. 103(a) as being unpatentable over Sprigg in view of Chang (US 5,724,425).

Sprigg meets all limitations of Claim 1 are discussed above. However, Sprigg does not teach where the identification information is a representative of a publisher of the removable storage. Chang teaches information representing the publisher of an application being sent to a host computer (Column 3 Lines 15-37 in Chang). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains to have used this information as the identification information in Claim 1. Chang provides motivation, since it provides a way “for authenticating that software distributed by a manufacturer is a legitimate copy of an authorized software release, and that the software contains only the original manufacturers code without tampering” (Column 3 Lines 1-5 in Chang). Thus, by combining the two devices, additional benefits are obtained.

Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sprigg in view of Barnett (US 6,292,874).

**Regarding Claims 9 and 10**, Sprigg teaches all limitations of Claim 1 as discussed above. However, Sprigg does not teach the storage management unit further enabling the software application to store additional data items in the allocated portion. Barnett teaches segregating applications such that each has its own memory space, where data other than identification information is also stored in this space (Column 3 Lines 7-11 in Barnett, also see Figure 3 in Barnett). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains to have allowed applications to store additional data items. As motivation, allowing applications to store additional data on the computer allows for faster access time (by allowing the data be placed in a CPU cache or RAM) compared to reading all data from the removable storage carrier. Thus, by combining the devices, additional benefits are obtained.

The combined device also meets the limitations of Claim 10, since the size of each application is limited (Column 3 Lines 11-18 in Barnett).

**Claim 16** is rejected under 35 U.S.C. 103(a) as being unpatentable over Sprigg in view of Atkinson et al (US 5,881,228).

**Regarding Claim 16**, Sprigg teaches all limitations of Claim 1 as discussed above. However, Sprigg does not explicitly teach allocating an equal size portion to each storage carrier. Atkinson teaches allocating an equal amount of memory to each external device ("each external device is allocated a memory space", Column 2 Lines 50-51, also see Figure 3, where each external device has the same amount of memory

space). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains to have allocated an equal size portion to each external device as in Atkinson for the storage carriers as in Sprigg, since allocating an equal size portion does not require complex calculation and is easier to implement than dynamically allocating a memory range. Thus, by combining the devices, additional benefits are obtained.

**Claim 17** is rejected under 35 U.S.C. 103(a) as being unpatentable over Sprigg in view of Bonola (US 2001/0011338).

**Regarding Claim 17**, Sprigg teaches all limitations of Claim 1 as discussed above. However, Sprigg does not explicitly teach allocating a size of a portion based on requirements of the application. Bonola teaches allocating memory to an application based on requirements of the application ("The application...identifies an unallocated region of memory that is appropriately sized, and allocates the memory to the application", abstract of Bonola, where "appropriately sized" corresponds to being sized according to the requirements of the application).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains to have used the allocation system of Bonola for the applications of Sprigg, because allocating memory based on the requirements of the application does not waste as much memory as a static allocation would.

**Claims 18-19** are rejected under 35 U.S.C. 103(a) as being unpatentable over Sprigg in view of Lawrence (US 6,629,113).

**Regarding Claim 18**, Sprigg teaches all limitations of Claim 1 as discussed above. However, Sprigg does not teach the storage management unit adapting the size of the portion over time. Lawrence teaches collecting memory from applications that are no longer in use, thus adapting the size ("a garbage collector...performs garbage collection to reclaim the memory space used by objects that are no longer referenced by an application, Column 1 Lines 31-35 in Lawrence).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains to have adapted the size of the portion of memory over time to avoid wasting memory on objects that are not referenced anymore.

**Regarding Claim 19**, Sprigg and Lawrence teach all limitations of Claim 18 as discussed above, wherein the memory management unit enlarges the size of the portion by reducing a size of another portion of the local storage arrangement allocated to another removable storage carrier ("the reclaimed memory is then recycled by reallocating the memory space for other objects", Column 1 Lines 34-35 in Lawrence).

## **ARGUMENTS CONCERNING NON-PRIOR ART REJECTIONS/OBJECTIONS**

### **Specification Objections**

Applicant's arguments/amendments with respect to the specification have been considered and have overcome the Examiner's prior objections and thus are withdrawn.

**Claim Objections**

Applicant's arguments/amendments with respect to the claim objections of claims 6 and 9 have been considered and have overcome the Examiner's prior objections and thus are withdrawn.

**Rejections - USC 112**

Applicant's arguments/amendments with respect to claims 1-14 have been considered and have overcome the Examiner's prior rejections and thus are withdrawn.

**ARGUMENTS CONCERNING PRIOR ART REJECTIONS**

**Rejections - USC 102/103**

Applicant's argument filed 2/27/2008 that Sprigg teaches allocating a portion of a common storage area to an application and data related to the application has been considered, but the limitation to which this applies does not appear to be in the claims. The claims do not recite a storage area with separate application and data areas which would indicate that Sprigg does not teach the claimed invention.

Applicant's arguments filed 2/27/2008 with respect to the limitations in Claims 1 and 15 have been fully considered but they are not persuasive. Sprigg teaches a storage management unit for allocating a portion of the local storage arrangement to the removable storage carrier (a storage management unit is inherently present for "receiving the application [from the remote storage carrier] at the device, [and] storing the application in a storage on the device [this storage on the device corresponding to a

portion of the local storage arrangement], paragraph 0013 in Sprigg) and referencing a portion with identification information (the identification information corresponding to "a unique identifier to distinguish it from other applications", Paragraph 0034 in Sprigg, also see Figure 4, step 400) respecting respective access rights to a data item stored in the portion granted to the software application ("if the application has privilege to the file's location...then the application is granted access to the file. If the application is not permitted access to the file's location, access is denied", Paragraph 0055 in Sprigg, also "the application is granted access to a portion of the storage...[and] the application is denied access to the storage area outside the granted portion" in the abstract of Sprigg) stored on the removable data carrier ("the applications 135 may be received...via the I/O device [the I/O device corresponding to the removable data carrier]", so the application is stored on and received from the removable data carrier, Paragraph 0028 in Sprigg).

Applicant's arguments filed 2/27/2008 with respect to the limitations in Claim 20 have been fully considered but they are not persuasive. Sprigg teaches a storage management unit for allocating a portion of the local storage arrangement to the removable storage carrier (a storage management unit must be present for "receiving the application [from the remote storage carrier] at the device, [and] storing the application in a storage on the device [this storage on the device corresponding to a portion of the local storage arrangement], paragraph 0013 in Sprigg) and referencing the portion with an identifier (the identification information corresponding to "a unique identifier to distinguish it from other applications", Paragraph 0034 in Sprigg, also see Figure 4, step 400) and respecting respective access rights to a data item ("if the

Art Unit: 2185

application has privilege to the file's location...then the application is granted access to the file. If the application is not permitted access to the file's location, access is denied", Paragraph 0055 in Sprigg, also "the application is granted access to a portion of the storage...[and] the application is denied access to the storage area outside the granted portion" in the abstract of Sprigg) stored in the portion granted to the removable storage carrier ("the applications 135 may be received...via the I/O device", so the application is stored on and received from the removable data carrier, Paragraph 0028 in Sprigg).

Applicant's argument with respect to Claims 16-19 have been considered but are moot in view of the new grounds of rejection.

## **CLOSING COMMENTS**

### **Conclusion**

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

### **STATUS OF CLAIMS IN THE APPLICATION**

The following is a summary of the treatment and status of all claims in the application as recommended by **M.P.E.P. ' 707.07(i)**:

### **CLAIMS REJECTED IN THE APPLICATION**

Per the instant office action, claims 1-20 have received a second action on the merits and are subject of a second action final.

### **DIRECTION OF FUTURE CORRESPONDENCES**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. Anthony Giardino whose telephone number is (571) 270-3565 and can normally be reached on Monday - Thursday 7:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Sanjiv Shah can be reached on (571) 272 - 4098. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Art Unit: 2185

M.A. Giardino

/M.G./

Patent Examiner

Art Unit 2185

May 18, 2008

/Sanjiv Shah/

Supervisory Patent Examiner, Art Unit 2185